

1 APPLICATION FOR UNITED STATES LETTERS PATENT

2 ON INVENTION FOR:

3 THERMOGLUE BINDING TAPE TO PROTECT AND DECORATE CARPET'S  
4 EDGES AND BORDERS WITH A FUSE SYSTEM

5 BY INVENTOR: Benigno G. Perez

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7 Agt. Doc. No.: PERB27X

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15 TO ALL WHOM IT MAY CONCERN:

16 BE IT KNOWN that I, Benigno G. Perez, a citizen of  
17 THE UNITED STATES OF AMERICA and resident of: Bronx, NY  
18 10469 have invented certain new and useful improvements in  
19 a(n): THERMOGLUE BINDING TAPE TO PROTECT AND DECORATE  
20 CARPET'S EDGES AND BORDERS WITH A FUSE SYSTEM of which the  
21 following is a full, clear, concise and exact description:

1 Inventor: Benigno G. Perez  
2 Invention: THERMOGLUE BINDING TAPE TO PROTECT AND DECORATE CARPET'S  
3 EDGES AND BORDERS WITH A FUSE SYSTEM  
4 DOC. No.: PERB27X

5 CROSS REFERENCE TO RELATED APPLICATIONS

6 The instant application is a continuation of U.S. application  
7 serial number 10/646,947, filed on 08/22/2003, and entitled PROTECTIVE  
8 CARPET BINDING, which claimed the priority of Republic of Peru  
9 application document number 000823-2002/OIN 000001, filed August 27,  
10 2002.

11 BACKGROUND OF THE INVENTION

12 Field of the Invention:

13 The present invention relates to a binding. More particularly, the  
14 present invention relates to a thermoglue binding tape to protect and  
15 decorate carpet's edges and borders with a fuse system.

16 Description of the Prior Art:

17 Numerous innovations for finishing strips have been provided in the  
18 prior art that will be described. Even though these innovations may be  
19 suitable for the specific individual purposes to which they address,  
20 however, they differ from the present invention.

21 A FIRST EXAMPLE, U.S. Patent No. 1,423,143 to Patterson teaches a  
22 strip for holding the edges of floor covering, a strip having a thin flap  
23 on the top of one edge, and a downwardly and inwardly inclined face on the  
24 other edge.

25 A SECOND EXAMPLE, U.S. Patent No. 4,054,698 to Hamrah teaches carpet  
26 binding tape for providing the edge portion of floor covering with a

1 uniform edge and including a body of adhesive material for adhesively  
2 securing the edge molding to the edge portion of the floor covering. The  
3 carpet binding tape prevents unraveling and fraying of the carpet and may  
4 be of flexible material thereby permitting the carpet to be rolled up  
5 without removal of the carpet binding tape.

6 A THIRD EXAMPLE, U.S. Patent No. 4,483,896 to Gray et al. teaches  
7 a carpet seaming apparatus that includes an elongated bonding tape having  
8 an electrical resistance circuit with contacts at the edge of the tape  
9 mounted on the face thereof with a hot melt adhesive in the form of  
10 elongated beads running the length of the tape that melts in response to  
11 electrical current in the resistive conductors. A tool having spaced  
12 apart electrical contacts for engaging the contacts adjacent the edges of  
13 the tape inducing an electrical current therein for heating and melting  
14 the hot melt adhesive.

15 A FOURTH EXAMPLE, U.S. Patent No. 5,018,235 to Stamatiou et al.  
16 teaches a holder for flexible material, for example a disposable floor  
17 mat, that comprises a base on which the material rests, at least part of  
18 the base having an integral wall so arranged as to form a recess. The  
19 recess is dimensioned so as to receive the material in a close fit and  
20 means are provided to hold the material in place. The holding means may  
21 comprise a lip integral with the wall of the holder which extends above  
22 the recess and means may be provided on the surface of the holder to act  
23 as a guide for the correct placement of the material. Additionally or  
24 alternatively the base of the holder may include holding means such as  
25 "Klettostop", which comprises a plurality of upwardly extending hooks or  
26 spikes formed from a plastic material. Means may also be provided for  
27 retaining the holder on a support surface.

28 A FIFTH EXAMPLE, U.S. Patent No. 5,045,374 to Tucker teaches a stiff  
29 plastic strip that is formed to provide reinforcement for longitudinal  
30 edges at which interior drywall surfaces meet and for capping corners  
31 formed of sheets of wallboard meeting at orthogonal angles. A pair of  
32 laterally directed flanges extend in diverging fashion from a central

1 transversely curved region of the plastic strip. A contact sensitive  
2 adhesive strip is mounted on each of the flanges to extend longitudinally  
3 therealong so as to allow the plastic strip to be pressed against drywall  
4 or wallboard surfaces. One of the flanges of the plastic strip may be  
5 slit periodically throughout its length to allow it conform to arches and  
6 circular openings. In another embodiment a stiff, water impervious  
7 plastic sheet with three flanges extending outwardly therefrom has contact  
8 sensitive adhesive layers disposed on each of the flanges. The structure  
9 can thereby serve as a cap for protruding soffit corners.

10 A SIXTH EXAMPLE, U.S. Patent No. Des. 394,776 to Callas teaches the  
11 ornamental design for a floor mater border.

12 A SEVENTH EXAMPLE, U.S. Patent No. 5,766,726 to Bannister teaches  
13 a resilient, semi-rigid molding strip for installation along an edge of  
14 an linoleum floor surface, particularly suited to installations where the  
15 edge follows a curved contour. The molding strip is formed from extruded  
16 semi-rigid vinyl. There is a horizontal top flange and a vertical web  
17 having an angled nailing surface along its lower edge. The nailing  
18 surface correctly aligns the fasteners, and the web section is drawn  
19 downwardly during installation so that the top flange is resiliently  
20 biased against the linoleum surface. The characteristics of the semi-  
21 rigid material permit the strip to be bent in the horizontal plane without  
22 buckling the top flange or footing section of the web.

23 AN EIGHTH EXAMPLE, U.S. Patent No. 6,517,922 B2 to Ang, et al.  
24 teaches a kit for use in finishing a cut edge of floor coverings such as  
25 mats, carpets, carpet runners, and roll runners having a cut side edge  
26 including an elongated edging strip which has a length equal to or  
27 exceeding the length of the cut edge to be finished. The lateral width  
28 of the edging strip is selected so that when secured in place, the strip  
29 substantially covers and conceals the cut edge. The edging strip includes  
30 a flexible ribbon and an attachment member provided to permanently secure  
31 the ribbon in position substantially overlapping the cut edge.  
32 Preferably, the attachment member comprises a piece of two-sided tape

1   having a length and width generally corresponding to that of the finishing  
2   strip. The two-sided tape is secured along a first side to the finishing  
3   strip, and a release sheet is carried by and releasably secured to the  
4   second other side of the tape. In use, the release sheet is removed to  
5   activate the adhesive tape, whereupon the second side of the tape is  
6   pressed into contact with the floor covering to secure the finishing strip  
7   or ribbon in place.

8       It is apparent that numerous innovations for finishing strips have  
9   been provided in the prior art that are adapted to be used. Furthermore,  
10  even though these innovations may be suitable for the specific individual  
11  purposes to which they address, however, they would not be suitable for  
12  the purposes of the present invention as heretofore described.





1                    LIST OF REFERENCE NUMERALS UTILIZED IN THE DRAWING

2        10        binding of present invention for protecting unfinished edge 12 of  
3                carpet 14.  
4        12        unfinished edge 12 of carpet 14  
5        14        carpet  
6        16        floor-abutting surface of unfinished edge 12 of carpet 14  
7        18        ambient-facing surface of unfinished edge 12 of carpet 14  
8        20        tape  
9        22        adhesive for adhering tape 20 to unfinished edge 12 of carpet 14  
10       24        pair of opposing surfaces of tape 20  
11       26        pair of opposing edges defining pair of opposing surfaces of tape  
12               20

13                    First Embodiment

14       110       binding  
15       120       tape for capturing unfinished edge 12 of carpet 14 (Figs 2 & 3)  
16       122       adhesive  
17       124       pair of opposing surfaces of tape 120

18                    Second Embodiment

19       210       binding  
20       220       tape for capturing unfinished edge 12 of carpet 14, (Figs 4 & 5)  
21       222       adhesive  
22       224       pair of opposing surfaces of tape 220  
23       226       pair of opposing edges of tape 220  
24       228       pair of adhesive strips of adhesive 222



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Third Embodiment

- 2     310     binding
- 3     320     tape (Figs 6 & 7)
- 4     322     adhesive
- 5     324     pair of opposing surfaces of tape 320
- 6     326     pair of opposing edges of tape 320
- 7     328     pair of adhesive strips of adhesive 322
- 8     330     welting
- 9     331     paper rope of welting 330
- 10    332     originating portion of tape 320
- 11    334     terminating portion of tape 320
- 12    336     flange of tape 320

1                   DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

2           Referring now to the figures, in which like numerals indicate like  
3 parts, and particularly to FIGURE 1, the binding of the present invention  
4 is shown generally at 10 for protecting an unfinished edge 12 of a carpet  
5 14. The unfinished edge 12 of the carpet 14 has a floor-abutting surface  
6 16 and an ambient-facing surface 18. The ambient-facing surface 18 of the  
7 unfinished edge 12 of the carpet 14 opposes the floor-abutting surface 16  
8 of the unfinished edge 12 of the carpet 14.

9           The binding 10 comprises a tape 20 and an adhesive 22. The tape 20  
10 has a pair of opposing surfaces 24 defined by a pair of opposing edges 26.  
11 The adhesive 22 is disposed on the tape 20, and is for adhering the tape  
12 20 to the unfinished edge 12 of the carpet 14.

13           The configuration of a first embodiment of the binding 110 can best  
14 be seen in FIGURES 2 and 3, and as such, will be discussed with reference  
15 thereto.

16           The adhesive 122 completely covers one surface of the pair of  
17 opposing surfaces 124 of the tape 120. The tape 120 is bent into a  
18 channel shape for capturing the unfinished edge 12 of the carpet 14 by  
19 having the one surface of the pair of opposing surfaces 124 of the tape  
20 120 originate against the floor-abutting surface 16 of the unfinished edge  
21 12 of the carpet 14, bend up over the unfinished edge 12 of the carpet 14,  
22 and terminate against the ambient-facing surface 18 of the unfinished edge  
23 12 of the carpet 14 so as to allow the adhesive 122 to abut the unfinished  
24 edge 12 of the carpet 14 completely and adhere the tape 120 to the  
25 unfinished edge 12 of the carpet 14 when the tape 120 is heated by a  
26 special iron design precisely for this purpose, which melts the adhesive  
27 122, and which is the subject matter of another application.

28           The configuration of a second embodiment of the binding 210 can best  
29 be seen in FIGURES 4 and 5, and as such, will be discussed with reference  
30 thereto.

1       The adhesive 222 is a pair of adhesive strips 228. One strip of the  
2 pair of adhesive strips 228 of the adhesive 222 extends along one surface  
3 of the pair of opposing surfaces 224 of the tape 220, adjacent one edge  
4 of the pair of opposing edges 226 of the tape 220. The other strip of the  
5 pair of adhesive strips 228 of the adhesive 222 extends along the other  
6 surface of the pair of opposing surfaces 224 of the tape 220, adjacent the  
7 other edge of the pair of opposing edges 226 of the tape 220.

8       The tape 220 is bent into a channel shape for capturing the  
9 unfinished edge 12 of the carpet 14 by having the one surface of the pair  
10 of opposing surfaces 224 of the tape 220 originate against the floor-  
11 abutting surface 16 of the unfinished edge 12 of the carpet 14, bend up  
12 over the unfinished edge 12 of the carpet 14, bend back under itself so  
13 as to allow the other surface of the pair of opposing surfaces 224 of the  
14 tape 220 to terminate against the ambient-facing surface 18 of the  
15 unfinished edge 12 of the carpet 14 so as to allow the one strip of the  
16 pair of adhesive strips 228 of the adhesive 222 to abut the floor-abutting  
17 surface 16 of the unfinished edge 12 of the carpet 14 and the other strip  
18 of the pair of adhesive strips 228 of the adhesive 222 to abut the  
19 ambient-facing surface 18 of the unfinished edge 12 of the carpet 14 and  
20 adhere the tape 220 to the unfinished edge 12 of the carpet 14 when the  
21 tape 220 is heated by the iron tool.

22       The configuration of a third embodiment of the binding 310 can best  
23 be seen in FIGURES 6 and 7, and as such, will be discussed with reference  
24 thereto.

25       The adhesive 322 is a pair of adhesive strips 328. One strip of the  
26 pair of adhesive strips 328 of the adhesive 322 completely covers one  
27 surface of the pair of opposing surfaces 324 of the tape 320.

28       The other strip of the pair of adhesive strips 328 of the adhesive  
29 322 extends along the other surface of the pair of opposing surfaces 324  
30 of the tape 320, adjacent one edge of the pair of opposing edges 326 of  
31 the tape 320.

1           The binding 310 further comprises welting 330. The welting 330 is  
2 a paper rope 331.

3           The welting 330 extends along the one surface of the pair of  
4 opposing surfaces 324 of the tape 320, substantially midway between the  
5 pair of opposing edges 326 of the tape 320, and is adhered thereto by the  
6 one strip of the pair of adhesive strips 328 of the adhesive 322 on the  
7 one surface of the pair of opposing surfaces 324 of the tape 320.

8           The tape 320 wraps around, and adheres to, the welting 330, with an  
9 originating portion 332 of the tape 320 and a terminating portion 334 of  
10 the tape 320 extending free of the welting 330.

11           The terminating portion 334 of the tape 320 overlies the originating  
12 portion 332 of the tape 320, and is adhered thereto by virtue of the one  
13 strip of the pair of adhesive strips 328 of the adhesive 322 on the one  
14 surface of the pair of opposing surfaces 324 of the tape 320 so as to form  
15 a flange 336.

16           The flange 336 of the tape 320 has the other strip of the pair of adhesive  
17 strips 328 of the adhesive 322 thereon by virtue of the terminating  
18 portion 334 of the tape 320 having the other surface of the pair of  
19 opposing surfaces 324 of the tape 320 exposed thereon. Flange 336 is  
20 impregnated with an edge sealing adhesive, typically FAST LOCK (R)  
21 manufacture by Orcon Corp. 1570 Atlantic street, Union city, ca 94587-  
22 3299. This makes the surface of tape 320 less porous so that adhesive  
23 does not penetrate through the material when it is applied to the carpet  
24 edge. It is further understood as a practical matter that the tape 320  
25 may be manufactured with or without adhesive 328.

26           The unfinished edge 12 of the floor-facing surface 16 of the carpet  
27 14 overlyingly abuts the flange 336 of the tape 320 and is adhered thereto  
28 by the other strip of the pair of adhesive strips 328 of the adhesive 322  
29 when the tape 320 is heated by the iron tool.

30           It will be understood that each of the elements described above, or  
31 two or more together, may also find a useful application in other types  
32 of constructions differing from the types described above.

1           While the invention has been illustrated and described as embodied  
2   in a thermoglue binding tape to protect and decorate carpet's edges and  
3   borders with a fuse system, however, it is not limited to the details  
4   shown, since it will be understood that various omissions, modifications,  
5   substitutions and changes in the forms and details of the device  
6   illustrated and its operation can be made by those skilled in the art  
7   without departing in any way from the spirit of the present invention.

8           Without further analysis, the foregoing will so fully reveal the  
9   gist of the present invention that others can, by applying current  
10   knowledge, readily adapt it for various applications without omitting  
11   features that, from the standpoint of prior art, fairly constitute  
12   characteristics of the generic or specific aspects of this invention.